CENTER FOR BEAM PHYSICS SEMINAR

"Optical Mixing Driven Kinetic Electrostatic Electron Nonlinear (KEEN) Waves"

Bedros Afeyan
Polymath Research Inc.
(Pleasanton, CA)

Friday, June 6, 2003, 10:30 AM
Albert Ghiorso Conference Room (71-264), LBNL

•••Refreshments served at 10:20 AM •••

Abstract: PRI's efforts are concentrated in equal measure on nonlinear plasma physics problems such as those that arise in laser-plasma interactions and Z pinch physics and nonlinear optics modeling in semiconductor optoelectronic devices. Kinetic equations, wavelets, and multiresolution analysis, spectral and finite element techniques are at the forefront of the types of theory and codes being developed at PRI.

Biographical data and research interests: Dr. Bedros Afeyan is a graduate of the University of Rochester where he obtained his Ph.D. on the theory of parametric instabilities in inhomogeneous plasmas. He has since worked at the University of Maryland, LLNL and UC Davis-Livermore before starting a scientific consulting and software development company based in Pleasanton, CA called Polymath Research Inc. Our sponsors and collaborators come from four of our national labs (LLNL, Sandia, NRL and LANL), DOE, the Navy and, until not so long ago, start-ups in Silicon Valley which will be back in action soon, it is hoped. We also have major collaborations with universities such as Stanford's Applied Physics departments, Université Henri Poincaré's Physics department in Nancy, France, Ecole Polytechnique, CPhT and LULI, Palaiseau, France, Université de Québec, INRS, University of Rochester, Institute of Optics, USC's EE Department, and UCLA's Physics Department.